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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,288	02/15/2006	Toshihiro Kobayashi	4495-081	6661
23429 7590 02/14/2008 LOWE HAUPTMAN HAM & BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314				
EXAMINER				
WRIGHT, INGRID D				
ART UNIT		PAPER NUMBER		
2835				
MAIL DATE		DELIVERY MODE		
02/14/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/518,288

Applicant(s)

KOBAYASHI, TOSHIHIRO

Examiner

INGRID WRIGHT

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 11, 12 is/are rejected.
- 7) ☒ Claim(s) 6-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 12/17/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 & 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chien US 6168249 B1.

Claim 1, Chien teaches a case (i.e. a computer mainframe housing, Abstract, Chien) for computer (Abstract) having a solid shape (i.e. rectangular shape of element (1), fig. 1, Chien) formed by plurality of outer panels (113) assembled together, and into which are installed bays for mounting modules (i.e. bays, prior art, fig. 9, Chien), comprising at least switches (i.e. switches on front surface of modules (41,42,43)) and insertion/removal openings for external storage modules on front side and at least connectors (i.e. connectors on a rear side of member (5), in a prior art, fig. 9, Chien) on rear side; wherein (1) the outer panels (113) are removably installed (note: outer panels of fig. 9, prior art are removably installed via screws) on outside of frame members (i.e. frame (1), fig. 1, Chien) that form outline of the solid shape (i.e. shape of frame (1)), (2) the frame members comprise, (b) corner parts (114,111) that are arranged at corners (c) outer frames that bridge the adjacent corner parts (114,111) and are affixed (3) the corner parts, and the outer frames are assembled, so that the case is easy to disassemble, but is silent as to inner frames being attached by screws. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize and attach inner panels on the solid structure of Chen, via screws, in order to provide a stronger housing support for the components inside the solid structure of

Chien. Also, it is well known in the art to strengthen electronic enclosures via a plurality of frame structures, attached by screws or other fastening means.

Additionally, Allen teaches a bay (21) for mounting modules (col. 3, lines 25-27, Allen) and additionally outer panels (10) assembled to frame (14), assembled via a fastener such as a screw (30) (fig. 6, Allen), but is silent as to a clear view of additional screws and a corner part being fastened via a screw. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the bay configuration of Allen in within the case of Chien, in order to provide a means of organizing and providing individual compartments for various (i.e. different) storage devices, within the case of Chien.

Claim 5, Chien teaches a case (i.e. a computer mainframe housing, Abstract, Chien), for computer having a solid shape (i.e. rectangular shape of element (1), fig. 1, Chien) formed by a plurality of outer panels (113) assembled together, and teaches the capability of bays (i.e. bays, prior art, fig. 9, Chien), into which modules (41,42,43) can be installed, for computer (i.e. a computer mainframe housing), comprising at least switches (i.e. switches depicted on modules (41,42,43), fig. 1, Chien) and insertion/removal openings (i.e. opening of 41,43,43, fig. 1, Chien), for external storage modules on front side (12); wherein (1) the outer panels (113) are removably installed on outside of frame members (i.e. frame (1)) that form outline of the solid shape (i.e. rectangular shape of element (1), fig. 1, Chien), (2) the frame members (i.e. members of frame (1)) comprise, (a) outer frames (i.e. members of frame (1)) that are arranged so as to form outline of each plane of the solid shape (i.e. rectangular shape of element (1), fig. 1, Chien), (b) corner parts (114,111) that are arranged at corners of the solid shape (i.e. rectangular shape of element (1), fig. 1, Chien) and that connect adjacent outer frames (i.e. frame (1)), (3) the outer frames (113) and the corner parts (114,111) are assembled so that the case (i.e. a computer mainframe housing, Abstract, Chien) is easy to disassemble, at least connectors (i.e. connectors on a rear side of member (5), in a prior

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art (fig. 9, Chien), and further teaches outer panels (i.e. outer panels, prior art of fig. 9, Chien), but is silent as to specifically the outer panels (113) & the corner parts (114,111) being assembled, via screws.

Additionally, Allen teaches a bay (21) for mounting modules (col. 3, lines 25-27, Allen) and outer panels (10) assembled to frame (14), assembled via a fastener such as a screw (30) (fig. 6, Allen), but is silent as to a clear view of additional screws and a corner part being fastened via a screw. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the bay configuration of Allen in within the case of Chien, in order to provide a means of organizing and providing individual compartments for various (i.e. different) storage devices, within the case of Chien.

As to additional outer panels, secured by screws, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a plurality of screws, as taught by Allen, to secure the outer panels (113) of Chien, since this is type of fastening configuration is common utilized in the art and is clearly well within the level of one of ordinary skill in the art.

As to corner parts being assembled, via screws, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify corner part (114,111) of Chien, by utilizing an alternate connection, i.e. by assembling the corner parts (114,111) via screws, instead of the connection of presently used, since these connections are functional equivalents and it would appear that either type of connection would work equally well between the corner part (114,111) and the frame (1).

2. Claims 2-4,11 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yuan et al. US 6920042 B2 (hereinafter: "Yuan") in view of Chien 6168249 B1.

Claim 2, Yuan teaches a case (30) for computer comprising (1) a first unit case (30), which has a solid shape (i.e. solid shape of case (30)) into which are installed at least a bay for external storage module and a bay for boards, including a motherboard (implied, but not shown by Yuan), (2) a second unit case (40), which has a solid shape into which is installed a bay for power module, and (3) the capability of a third unit case (implied, but not shown by Yuan), which is capable of having a solid shape into which is

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installed a bay for internal storage module, wherein (1) the outer panels (implied, but not shown by Yuan) are removably installed by using screws (implied, but not shown by Yuan) on outside of frame members that form outline of each of the solid shape of the first, second, and third unit cases (2) the frame members comprise, (a) inner frames (34) that are arranged so as to form outline of each plane of the solid shape, but is silent as to corner parts. Chien teaches corner parts (114,111). It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the corner part of Chien, in the invention of Yuan, in order to provide an alternative, but functionally equivalent means of assembling the case (30) of Yuan.

Claim 3 Yuan in view of Chien, teaches wherein the second and a third unit case can be affixed onto the rear of the first unit case.

Claim 4, Yuan in view of Chien, teaches wherein installing panels (i.e. panels are implied but not shown by Yuan) for external storage modules, internal devices such as a motherboard and switches, a power module, and internal storage modules are installed within the first, second, and third unit cases by using screws, so that said panels can easily be installed and removed and further teaches fasteners, such as screws (col. 2, lines 60-63).

Regarding the method steps of claim 11, the method steps are inherently necessitated by the device structure as taught by Yuan & Chien. Yuan & Chien disclosed a method of manufacturing a case (i.e. a computer mainframe housing, Abstract, Chien) for computer (i.e. a having a solid shape formed by a plurality of outer panels (113) assembled together, and into which are installed bays (21) for mounting modules for computer, with said method comprising (1) a first step of frame members (1) assembled that form outline of the solid shape, in such a way that disassembly is easy, by (a) inner frames (34) arranged so as to form outline of each plane of the solid shape (i.e. solid shape of frame (1)), (b) corner parts arranged at corners (114,111) of the inner frames (34), (c) connecting the adjacent inner frames (34), and (d) affixing outer frames (113) onto the inner frames (34) with bridging the adjacent corner parts

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(114,111), and (2) a second step of affixing the outer panels (113) to the outside of the frame members (i.e. members frame of (1)), by using screws (i.e. fastener disclosure, Yuan) in a manner that makes the case easy to disassemble.

Regarding the method steps of claim 12, the method steps are inherently necessitated by the device structure as taught by Yuan & Chien. Yuan & Chien disclosed a method of manufacturing a case for computer having a solid shape into which are installed bays for mounting modules (41,42,43) for computer and onto which a plurality of outer panels are affixed, with said method comprising (1) a first step of frame members (i.e. members of frame (1)) assembled that form outline of the solid shape, in such a way that disassembly is easy, by (a) outer frames (113) arranged so as to form outline of each plane of the solid shape, (b) comer parts (114,111) arranged at comers of the outer frames, (c) the adjacent outer frames connected, and (2) a second step of the outer panels (113) affixed to the outside of the frame members (i.e. members of frame (1)), by using screws (i.e. fasteners disclosure, Yuan), in a manner that makes the case easy to disassemble.

Allowable Subject Matter

3. Claims 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The following is a statement of reasons for the indication of allowable subject matter: the allowability resides in the overall structure of the device as recited by dependent claim 6, and at least in part, because claim 6 recites: " a pair of left-side and right-side first angle panels & second angle panels that (a) are arranged across two vertically stacked large disk drives and sustain the two drives from their respective sides and affixed to top face of a bay fixing panel that is affixed to an outer frame that forms bottom plane of the case, left and right side third angle panels, wherein a plurality of second angle panels that have the same shape as the aforementioned second angle panels, can be installed consecutively (1) by being

arranged across vertically adjacent two of a plurality of third left-side and right-side third angle panels that have the same shape as the aforementioned third angle panels, and that sustain one by one a plurality of small disk drives that are stacked successively on the aforementioned small disk drive from their respective sides, and (2) by fixing the two adjacent third angle panels.” The aforementioned limitations in combination with all remaining limitations of claims 6, are believed to render the claim 6 and all claims dependent thereupon, patentable over the art of record.

US 6168249 B1 to Chien is considered a close reference to the instant application. Chien disclosed corner parts (114,111), a solid shape (i.e. solid shape of frame (1)), fig. 1, Chien), a case (i.e. casing formed by frame (1) and outer panels (113), but is silent as to a second or third case affixed to the rear of the case (i.e. case formed by frame (1) and right side angle panels.

US to 6049452 to Yuan et al. is considered a close reference to the instant application. You disclosed a first case (10), a second case (18) and a plurality of left and right side angel panels (fig. 1, Yuan), but is silent as to the right and left side angle panels being affixed to the outer frame.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Liao US 6377446 B1 shows the general state of the art regarding computer enclosure with detachable housing configurations.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INGRID WRIGHT whose telephone number is (571)272-8392. The examiner can normally be reached on M-F. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayprakash Gandhi can be reached on (571)272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or

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Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IDW

/Jayprakash N Gandhi/
Supervisory Patent Examiner, Art Unit 2835